EXHIBIT

Exhibit No. _____
Issue(s) Rate of Return
Witness Charles W. King
Type of Exhibit Rebuttal Testimony
Sponsoring Party Public Counsel

REBUTTAL TESTIMONY

OF

CHARLES W. KING

Submitted on Behalf of
The Office of Public Counsel

THE EMPIRE DISTRICT ELECTRIC COMPANY

Case No. ER-2006- 0315

July 28, 2006

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In The Matter of the Empire District Electric Company of Joplion, Missouri for Authority To File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	)))))	**Case No. ER-2006-0315**

AFFIDAVIT OF CHARLES W. KING

COUNTY OF HANCOCK)
) ss
STATE OF MAINE)

Charles W. King, of lawful age and being first duly sworn, deposes and states:

1. My name is Charles W. King. I am a Public Utility Consultant for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony consisting of 11 pages and schedules CWK-1 (revised) and CWK-9.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Charles W. King
Public Utility Consultant

Subscribed and sworn to me this 27th day of July 2006

Donna L Sawyer
Notary Public

Donna L Sawyer

My commission expires 11-21-2007

REBUTTAL TESTIMONY OF CHARLES W. KING

INTRODUCTION

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Charles W. King. I am President of the economic consulting firm of Snavely King Majoros O'Connor & Lee, Inc. My business address is 1111 14th Street, N.W., Suite 300, Washington, DC 20005.

Q. ARE YOU THE SAME CHARLES W. KING WHO SUBMITTED DIRECT TESTIMONY IN THIS CASE ON BEHALF OF PUBLIC COUNSEL ON JUNE 23, 2006?

A. Yes. I am.

Q. IS THIS TESTIMONY ALSO SUBMITTED ON BEHALF OF PUBLIC COUNSEL?

A. Yes. It is.

SHORT-TERM DEBT

Q. WHAT IS THE ISSUE WITH RESPECT TO SHORT-TERM DEBT?

A. The issue is the need to revise the capital structure I presented in Schedule CWK-1 attached to my initial direct testimony.

Q. WHY ARE YOU REVISING THE CAPITAL STRUCTURE YOU PRESENTED IN YOUR INITIAL DIRECT TESTIMONY?

A. As I pointed out on page 5 of my direct testimony, the amount of short term debt included in the capital structure is to some extent based on the outstanding amount of Construction Work In Progress ("CWIP"). In Missouri, CWIP is not included in the rate base. I understand that it is the practice in Missouri to offset any short-term debt balances against the CWIP balances. If CWIP exceeds the short-term debt, then short-term debt should not be included in the capital structure used to compute the return to rate base.

In Schedule 1 attached to my direct testimony, I showed a CWIP balance of $13,143,000 for the month ending March 31, 2006. I have been informed that this is the amount of CWIP activity during March, not the total CWIP balance at the end of the month. Empire has since provided me with its March 31, 2006 financial statement, which shows that the CWIP balance on that date was approximately $52 million. Since this amount exceeds the $46 million in short-term debt as of that date, Missouri PSC practice would eliminate any short-term debt from the capital structure used to determine the return on rate base.

Q. HAVE YOU PREPARED A REVISED VERSION OF YOUR SCHEDULE CWK-1 THAT REFLECTS THE ABSENCE OF ANY SHORT-TERM DEBT?

A. Yes. Schedule CWK-1 (Revised) shows the calculation of the return to rate base without any attribution of short-term debt. The overall rate of return is 8.30 percent as compared with 8.19 percent as shown in Schedule CWK-1 attached to my initial direct testimony.

Q. HAVE YOU UPDATED ANY OF THE OTHER DATA IN SCHEDULE CWK-1?

A. No. I understand that these data will be updated in the true-up prepared by Commission Staff and the parties just prior to the hearing in September.

JAMES VANDERWEIDE

Q. WHAT RATE OF RETURN TO EQUITY HAS EMPIRE WITNESS JAMES VANDERWIEDE RECOMMENDED?

A. Dr. VanderWeide recommends a return on equity of 11.7 percent. This value is based on his claim that his proxy group of electric companies has an equity return requirement of 11.3 percent, a number derived by averaging his DCF result with those from his CAPM application and his two risk premium analyses. He derives 11.7 percent for Empire by applying the composite capital cost of the proxy group to the capital structure of Empire. Dr. VanderWeide alleges that this increase is appropriate to reflect the greater financial risk of Empire's more leveraged capital structure relative to that of the proxy group.

Q. HAVE YOU ALREADY ADDRESSED SOME OF THE MANY INFIRMITIES OF DR. VANDERWIEDE'S EQUITY RETURN ANALYSIS?

A. Yes. In my initial direct testimony, I made the following points with respect to Dr. VanderWeide's equity return analysis:

- Dr. VanderWeide's proxy group of electric companies includes two companies, FPL Group and Constellation Energy, that have announced a merger, in violation of the fifth of Dr. VanderWeide's selection criteria (p. 6)
- Dr. VanderWeide's proxy group of electric companies includes four companies that are more heavily involved in gas distribution than electric service (p.6).

- Dr. VanderWeide's proxy group of electric companies includes one company, MDU Resources, that is most heavily involved in non-utility activities (p.6).
- Dr. VanderWeide's proxy group of electric companies includes TXU Corporation which has an equity percentage of approximately 3.5 percent (p.6).
- Dr. VanderWeide's proxy group of electric companies includes 10 companies that have less than 75 percent of their revenues derived from regulated operations. By contrast, Empire derived 93.2 percent of its revenues from regulated electric service in 2005 (pp. 6, 7).
- Dr. VanderWeide forecasts next year's dividend by applying the "g" factor to the current year's dividend, thereby assuming unrealistically that each company will increase its dividends regardless of its cash flow condition (p. 17).
- Dr. VanderWeide applies the quarterly compounding procedure to next year's dividend, even though the compound earnings are not the responsibility of the dividend-issuing company (p.17).
- Dr. VanderWeide uses earnings forecasts from a single source, I/B/E/S, when other sources, such as Value Line and Zacks.com, are also available (p.17).
- Dr. VanderWeide's "ex ante" risk premium analysis is self-contradictory. It uses a DCF series that shows the November 2005 return requirement at 9.66 percent to derive a rate of return indication of 10.9 percent (p.25).
- The variation in the historical risk premiums in Dr. VanderWeide's "ex post" risk premium analysis is so great as to render the average statistically unreliable (p.26).
- Dr. VanderWeide's "ex post" analysis is based on the unsupportable assumption that the average realized return represents a valid expression of expected return (pp. 26, 27).

- Dr. VanderWeide's "ex post" analysis makes the incorrect assumption that risk premiums do not vary over time (p.27).

Q. DO YOU HAVE ANY FURTHER REBUTTAL TO DR. VANDERWEIDE?

A. Yes. I would like to respond to Dr. VanderWeide's criticisms of the DCF method and to his assertion that Empire has greater financial risk than his proxy group of companies.

Q. WHAT ARE DR. VANDERWIEDE'S CRITICISMS OF THE DCF APPROACH?

A. At pages 30 and 31 of his testimony, Dr. VanderWeide offers two criticisms of the DCF approach. First, he argues that the DCF approach does not make economic sense because DCF results have varied more than interest rates over the last four years. Specifically, he notes that the range of DCF results has been 442 basis points while that of interest rates has been only 330 basis points. He further notes that the standard deviation of DCF results has been 153 basis points compared with only 93 basis points for interest rates.

Dr. VanderWeide's second criticism of the DCF approach has to do with the result. His DCF finding of 9.9 percent is significantly below the results of his other tests, namely the CAPM and his two risk premium analyses.

Q. WHAT IS YOUR RESPONSE TO THE FIRST OF THESE CRITICISMS?

A. The relative variability of DCF indications and interest rates noted by Dr. VanderWeide makes considerable economic sense. First, from a purely statistical standpoint, it is to be expected that the absolute variation around a higher average (DCF equity returns) would be greater than the variation around a lower average

(interest rates). Interest rates (Dr. VanderWeide does not say which) have been in the 3 to 6 percent range during the past four years, averaging, say, 5 percent. Utility DCF returns (again unidentified) have probably ranged from the low 9 percent to about 11 percent averaging, say, 10 percent. The same degree of variability around a 5 percent average would be exactly half that around a 10 percent average if both are expressed in absolute terms. In fact, Dr. VanderWeide's range of interest rates is considerable less than half the range of DCF return indications.

But even if there were more variability in DCF returns than interest rates, that greater variability is to be expected. That is because equity investment is more risky than debt investment, which explains why investors expect higher returns from equity. Equity investment receives the residual earnings of any company after its debt obligations – interest and debt redemption – are met, and so the likelihood of failing to meet expected equity returns is far less assured. It is to be expected that equity returns would vary far more than interest rates.

Q. WHAT IS YOUR RESPONSE TO THE SECOND OF DR. VANDERWIEDE'S CRITICISMS OF THE DCF APPROACH?

A. Dr. VanderWeide argues that the DCF results for electric utilities deviate significantly from the cost of equity results obtained from other cost of equity methods, namely, the CAPM and his two risk premium approaches.

The fault is not with the DCF approach, but with the other methods. In my direct testimony, I note the considerable judgment that goes into any CAPM application, and I apply a set of very reasonable CAPM inputs to derive a result that is only 20 basis points different from my DCF return indication. As for the two risk premium tests, I demonstrate that each is based on totally unreasonable

assumptions, and the ex post approach is statistically unreliable as well. They are so flawed that they cannot be used to denigrate the DCF approach.

Q. WHAT IS THE BASIS FOR DR. VANDERWEIDE'S ASSERTION THAT EMPIRE HAS GREATER FINANCIAL RISK THAN HIS PROXY GROUP OF COMPANIES?

A. The basis for this claim is two tables toward the end of Dr. VanderWeide's testimony. The first is Table 5 on page 52, which shows the capital structure and the weighted average cost of capital for Dr. VanderWeide's proxy group. This table indicates that the proxy group has an average common equity proportion of 61.46 percent. The second table is Table 7 on page 53, which shows Empire as having a common equity proportion of only 51.45 percent.

Q. IS THERE ANYTHING WRONG WITH THIS COMPARISON?

A. Yes. This is an apples-and-oranges comparison. The equity percentage for the proxy group in Table 5 is based on market valuations, that is, the market price of the stock times the number of shares outstanding. Empire's equity percentage on Table 7 is based on its book value, a very different number both by definition and in absolute value. Market value is the trading value of the stock. Book value is an expression of the historical commitment of capital assignable to equity investors. On July 25, the market value of Empire's stock was $21.27 per share. The book value of Empire's stock is currently about $15.55.

Q. WHAT ARE THE TRULY MEANINGFUL COMPARISONS BETWEEN THE PROXY COMPANIES' CAPITAL STRUCTURES AND THAT OF EMPIRE?

A. Meaningful comparisons of book values are shown on Schedules CWK-3 and CWK-4 attached to my direct testimony. Line 1 on those schedules shows that the equity proportion of Empire's permanent book capital (exclusive of short-term debt) at the end of 2005 was 48.36 percent, which is higher than the corresponding book equity proportion of my "broad group" of comparable companies of 44.5 percent (CWK-3) and the book equity proportion of 45.15 percent for my "narrow group" (CWK-4).

Schedule CWK-9 attached to this testimony provides the apples-to-apples comparison using market valuations. It reveals that Empire's market-value equity is 60.99 percent, only fractionally lower than the 61.46 percent that Dr. VanderWeide finds for his comparison group.

Based on these comparisons, it is clear that Empire does not experience any greater financial risk than do the proxy groups of either Dr. VanderWeide or myself. If anything, it has a lower financial risk than the typical electric utility, as demonstrated in Schedules CWK-3 and CWK-4.

DAVID MURRAY

Q. WHAT RATE OF RETURN TO EQUITY DOES DAVID MURRAY RECOMMEND FOR EMPIRE?

A. Mr. Murray finds that Empire's rate of return is in the range of 9.20 to 9.50 percent.

Q. HOW DOES THIS RECOMMENDATION COMPARE WITH YOURS?

A. I have recommended a rate of return to equity of 9.65 percent, which is 15 to 45 basis points higher than Mr. Murray's range.

Q. WHAT ACCOUNTS FOR THE DIFFERENCE IN YOUR RESPECTIVE FINDINGS?

A. Mr. Murray and I use almost exactly the same approaches to developing our respective rate-of-return recommendations. We both rely principally on the DCF methodology, using investment analysts' forecasts of long-term earnings growth for the "g" factor in the DCF formula, and we have both used the CAPM approach to test our DCF results.

The principal reason for the difference in our results is that Mr. Murray uses a smaller sample of comparable electric companies, specifically, six publicly traded vertically integrated electric utilities. My DCF analysis relied on a sample of 16 electric companies that derive over 75 percent of their revenues from regulated operations. My sample may include some utilities that have divested their generation assets and are no longer vertically integrated.

Q. DOES IT MAKE SENSE THAT MR. MURRAY'S SAMPLE SHOULD YIELD A LOWER RATE OF RETURN THAN YOURS?

A. Yes. A vertically integrated utility incurs lower risk than one that must rely on the public markets to secure its power. As we have seen in California and more recently in Maryland, such reliance can lead to very unfavorable results for the utility. A vertically integrated utility with regulated generation rates has a much more stable and, under current conditions, a lower cost source of power than one that must rely on the regional power markets.

Q. SINCE EMPIRE IS VERTICALLY INTEGRATED, DO YOU THEREFORE RECOMMEND MR. MURRAY'S RETURN RANGE IN LIEU OF YOUR 9.65 PERCENT EQUITY RETURN RECOMMENDATION?

A. No. I am concerned that Mr. Murray's six utilities may be too small a sample to eliminate company-specific aberrations in the DCF results. On the other hand, I certainly do not recommend that Mr. Murray's analysis be ignored. Rather, I believe that Mr. Murray has described the lower end of the appropriate rate of return to Empire's equity capital, while my recommendation, which reflects some utilities that are not vertically integrated, represents the high end of that range.

Q WHAT IS THE CONSEQUENT RANGE OF EQUITY RETURN FOR EMPIRE?

A. The range of equity return the falls out of my analyses and those of Mr. Murray is between 9.2 percent and 9.65 percent.

Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

Case No. ER-2006-0315
Exhibit of Charles W. King
Schedule CWK-1 (Revised)

Empire District Electric Company
Cost of Capital

	A	B	C	D	E
Capital Structure March 31, 2006:					
		Amount Outstanding 000s	Percent of Total	Cost Rate	Weighted Return
1	Long-term Debt	$ 410,112	51.64%	7.04%	3.64%
3	Common Equity	384,040	48.36%	9.65%	4.67%
4	Short-term Debt		0.00%	5.59%	0.00%
5	Total	$ 794,152	100.00%		8.30%

Sources:

Capital Structure: Empire's March 31 Form 10Q, page 7
Long-term Debt Cost: Empire's Schedule H.1
Short-term Debt Cost:Response to P.C. Data Request 4013
Equity Cost: Testimony

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Exhibit of Charles W. King
Schedule CWK-9

Empire District & Proxy Group Electric Companies
Market-Based Capital Structures

	A	B	C	D
		Empire District		VanderWeide Proxy Group
		Amount Outstanding 000s	Percent of Total	Percent of Total
	Long-term Debt	$ 410,112	39.01%	37.71%
2	Preferred Stock			0.82%
3	Common Equity	641,291	60.99%	61.46%
5	Total	$ 1,051,403	100.00%	100.00%

Market Capitalization

Shares Outstanding ($mil)		30.15
Recent Price	$	21.27
Market Capitalization ($mil)	$	641.29

Sources:

Empire Debt: Empire's March 31, 2006 Form 10Q, page 7
VanderWeide Capital Structure: VanderWeide Testimony, Table 5, p. 52
Empire Share Outstanding: Value Line Report, EDE, June 30, 2006
Empire Market Value: Yahoo Finance, July 25, 2006